

Statement of Dennis Haubenschild
Before the Department Operations, Oversight, Nutrition and Forestry Subcommittee
March 15, 2004

Mr. Chairman Gutknecht and members of the committee, I thank you for the opportunity to speak before you today. My name is Dennis Haubenschild; I am a dairy operator along with my wife Marsha and two sons Thomas and Bryan of Haubenschild Farm in Princeton, Minnesota. I'm giving this testimony about our anaerobic digester project on Haubenschild Farm to show how important this project can be to farmers, ranchers, and rural small businesses. I believe this program can help support self-sufficiency, promote rural economic development, and help have a more sustainable environment.

First of all I would like to thank the U.S. Environmental Protection Agency (EPA), the U.S. Department of Agriculture, and the U.S. Department of Energy for sponsoring the AgSTAR Program which Haubenschild Farm applied for and was selected as an AgSTAR "Charter Farm", one of 13 such farms selected nationwide to demonstrate farm-scale anaerobic digestion technologies. The program encourages the use of methane recovery (biogas) technologies at animal feeding operations.

I would also like to thank East Central Energy of Brahm, Minnesota our local rural electric cooperative. East Central Energy was the first rural electric cooperative in the state of Minnesota. With there mission to enhance the quality of life and provide premier service to their customers, they were first to offer environmental programs such as their bio-mass or Cow Power program to their customer members to purchase renewable power. This has help to made it a win-win program for ECE, our dairy, and the community. I really believe they should get a congressional award for their work.

I have always believed a great percentage of the farms in the U.S. could and should take advantage of this technology, but with the economies in agriculture today most farms will have difficulty financing a digester project from traditional lending institutions. The Haubenschild project financing was achieved by a collaboration of government agencies, through a combination of direct technical assistance, grants and low-interest loans. The AgStar program provided the technical assistance for the project, estimated at \$40,000. The Minnesota Department of Commerce and the Minnesota Office of Environmental Assistance offered grants totaling \$87,500 for construction of the system and the Minnesota Department of Agriculture was able to offer a \$150,000 no-interest loan for the project. This left \$77,500 that Haubenschild Farm paid directly.

A copy of the "Final Report: Haubenschild Farms Anaerobic Digester" can be downloaded at: www.mnproject.org...

Since September 24, 1999, the digester has produced over 106 million cubic feet of bio-gas which has made 4.5 million kWh of electricity at a value of \$320,000. The bio-gas burned is equivalent to 29000 tons of carbon credits. The generator has been running 98.6 percent of the time, 24 hours a day, and 7 days per week. It has created enough hot water to heat all the floors in

the dairy, saving 800 gallons of LP gas a week in the winter. With the enhanced value of the manure, it makes for a payback of less than five years on the total investment.

The best benefit is the improved surface and ground water quality, enhanced fertilizer value of the processed manure, and the virtual elimination of offensive odors.

Last January, one of the coldest months, Haubenschild Farm produced 109,880 kWh of electricity, and sold 62,860 to the electric co-op, enough electricity for the dairy plus 78 homes in the neighbor-hood. This is a saving of about 35 tons of coal that did not have to be burned to make electricity and 1200 gallons of LP that did not have to be burned to heat water. In the spring when the digestate is incorporated into the ground it will save another 34 gallons per acre of propane or natural gas equivalent that did not have to be used to make anhydrous ammonia.

Reasons for Anaerobic Digestion

1. Reduce Odor
2. Generation of Electricity
3. Thermal energy production
4. Increase in value as fertilizer
5. Pathogen reduction
6. Weed seed reduction
7. Greenhouse gas reduction - Carbon Credit value

Clearly, a major change in perspective has taken place from viewing manure as a waste product to it becoming a renewable resource. Its ability to help support a heavily strained power grid system is starting to get some recognition.

Perhaps an even more compelling reason for increased acceptance of manure digesters is their ability to reduce pollutants and odor risks associated with manure. In summary these are expected benefits of an anaerobic digester: Odor control; Generation of electricity; Thermal energy production; Potential increase in value of manure as fertilizer; Pathogen reduction; Weed seed reduction; and Greenhouse gas reduction. As costs of fuel increase and odor complaints from neighbors mount animal production facilities are looking for ways to shave costs by generating their own electricity and reduce dependence on propane/ natural gas to heat process water.

When it comes to carbon or energy use, The U.S. is driving down a dead end street at 100 miles an hour. Methane or Bio-gas is never going to be as efficient as coal when it come to generating electricity ,but it takes Mother Nature 21 days to make bio-gas and 21 million years to make coal. Hopefully as more electric utilities start using greenhouse gas offsets from renewable energy faculties, the trading of carbon credits will become a business opportunity for both the producer and the utility.

Thank You:
Dennis Haubenschild
7201 349th Ave. NW
Princeton, Minnesota. 55371

Dennis Haubenschild

Dennis Haubenschild owns and operates the 1,000-cow Haubenschild Dairy with his wife Marsha and sons Tom and Bryan and their families near Princeton, Minnesota. Dennis grew up on this farm with started with his parents in 1952. He has been interested and done research on anaerobic digestion in the early 70's. They began operating a plug flow methane digester system in September 1999. Since then, the system has logged in excess of 38,000 hours. The goals have been to show sustainable and environmentally sound methods for not only the dairy industry but other industries and government agencies alike. Dennis has been active in the Minnesota dairy industry for many years. He has shared his experiences installing and operating a methane digestion with numerous groups from across the country and hosts hundreds of visitors at the farm each year seeking to learn about their operation.

Committee on Agriculture
U.S. House of Representatives
Required Witness Disclosure Form

House Rules* require nongovernmental witnesses to disclose the amount and source of Federal grants received since October 1, 2001.

Name: Dennis Haubenschild
Address: 7201 349th Av. N.W.
Telephone: 763-389-2867
Organization you represent (if any): Haubenschild Farm Inc.

1. Please list any federal grants or contracts (including subgrants and subcontracts) you have received since October 1, 2001, as well as the source and the amount of each grant or contract. House Rules do **NOT** require disclosure of federal payments to individuals, such as Social Security or Medicare benefits, farm program payments, or assistance to agricultural producers:

Source: None Amount: _____

Source: _____ Amount: _____

2. If you are appearing on behalf of an organization, please list any federal grants or contracts (including subgrants and subcontracts) the organization has received since October 1, 2001, as well as the source and the amount of each grant or contract:

Source: None Amount: _____

Source: _____ Amount: _____

Please check here if this form is NOT applicable to you: _____

Signature: Dennis Haubenschild

* Rule XI, clause 2(g)(4) of the U.S. House of Representatives provides: Each committee shall, to the greatest extent practicable, require witnesses who appear before it to submit in advance written statements of proposed testimony and to limit their initial presentations to the committee to brief summaries thereof. In the case of a witness appearing in a nongovernmental capacity, a written statement of proposed testimony shall include a curriculum vitae and a disclosure of the amount and source (by agency and program) of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) received during the current fiscal year or either of the two previous fiscal years by the witness or by any entity represented by the witness.

PLEASE ATTACH DISCLOSURE FORM TO EACH COPY OF TESTIMONY.